Scaling up prevention and control of noncommunicable diseases: The SEANET-NCD meeting

Report of the Meeting
Phuket, Thailand, 22–26 October 2007
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1. **Introduction**

Chronic noncommunicable diseases (NCDs) are the leading cause of mortality, morbidity and disability in the Member countries of the South-East Asia (SEA) Region of the World Health Organization. The Global Strategy for the Prevention and Control of NCDs identifies networking as one of the major areas of international action on surveillance, prevention and control of NCDs. The 60th World Health Assembly Resolution on Prevention and Control of NCDs (WHA 60.23) urged Member States to establish and strengthen national coordinating mechanisms and local coalitions for the prevention and control of NCDs. The resolution requested WHO to support networking as an effective means of cooperation at the global, regional and national levels.

NCDs are largely preventable. With the application of existing knowledge alone it is possible to prevent 80% of all cases of premature heart disease, stroke and diabetes and 40% of cancers. The target proposed by WHO is to reduce death rates from NCDs by 2% per year over existing trends during the next 10 years. In the context of the SEA Region this would mean preventing eight million deaths, with five million of these being among people under 70.

The SEA Regional Network for NCD Prevention and Control (SEANET-NCD) was initiated in 2005 to facilitate the dissemination of information and exchange of experiences and to promote the adoption of strategic approaches for NCD control. Since then Member countries have initiated many new activities for the prevention and control of NCDs. Oral health (ORH) – which has not received adequate attention in the SEA Region – may benefit from integration with the NCD programme. The basis for integration of both programmes lies in the commonalities in risk factors involved and the public health interventions to address them.

SEANET-NCD consists of national programmes, experts and institutions dealing with NCD control. At its biennial meeting in 2005 at Bandos, Maldives, SEANET-NCD recommended that in view of the increasing challenges faced the SEA Region should have a framework for the prevention and control of NCDs. It was envisaged that the framework contributes to the strengthening of high-level commitment and facilitates
the development of national policies, plans and programmes for integrated prevention and control of NCDs in the Region, based on collaborative and multisectoral actions encompassing health promotion and the prevention and control of NCDs.

The Regional Framework for Prevention and Control of NCDs was formulated in 2006 and endorsed by the Sixtieth Session of the WHO Regional Committee for the SEA Region. Operationalization of the framework is considered an important challenge and opportunity for all partners contributing to SEANET-NCD.

2. Objectives of the meeting

2.1 General objective

The general objective of the meeting was to facilitate and support the process of planning and implementing NCD control and oral health programmes in the Region in line with the Regional Framework for Prevention and Control of NCDs.

2.2 Specific objectives

The specific objectives were:

- To review progress in prevention and control of NCDs in the SEA Region;
- To review the status of ORH programmes and advise on their integration with NCD prevention and control; and,
- To provide inputs towards the development of a regional and global plan of action for integrated prevention and control of NCDs for 2008-2013.

3. Organization of the Meeting

The meeting was inaugurated by Dr Poonam Khetrapal Singh, Deputy Regional Director, WHO SEA Region, on behalf of the Regional Director, Dr Samlee Plianbangchang. The text of the Regional Director’s message is
at Annex 1. During the inauguration, Dr Seri Hongyok, Deputy Director-General, Department of Disease Control, Ministry of Public Health, Royal Government of Thailand, welcomed the participants and emphasized the need to share experiences for the formulation of comprehensive national policies and programmes between countries of the Region and to assess the progress made in this regard. Dr Seri Hongyok was elected the Chair for the meeting. Dr Lakshmi Somatunga, Director, Noncommunicable Diseases, Ministry of Healthcare and Nutrition, Government of Sri Lanka, and Dr Sonam Ugen, Chief Programme Officer, NCD, Department of Public Health, Ministry of Health, Royal Government of Bhutan, were elected as Co-Chairpersons. Dr Anand Krishnan, Associate Professor, Dept of Community Medicine, All India Institute of Medical Sciences (AIIMS), India was elected as the Rapporteur.

The meeting was attended by representatives of national NCD networks and programmes from 10 countries of the WHO SEA Region, governmental and nongovernmental organizations, and WHO staff from country and regional offices and from Headquarters. Annex 2 provides the list of participants.

In addition to presentations by the representatives of countries and guest speakers, the meeting had three working group sessions deliberating on the following topics: (i) networking - challenges and opportunities; (ii) legislation in NCD prevention and control/oral health, and (iii) global and regional NCD plan of action. There were also four panel discussion sessions covering: (i) creating conducive regulatory and legislative environment for NCD prevention and control; (ii) NCD and oral health community-based interventions; (iii) prevention and management of NCDs at the primary health-care (PHC) level, and (iv) NCD surveillance.

4. Progress made in NCD prevention and control

4.1 Global and regional update

Dr S. Resnikoff, Coordinator, Chronic Disease Prevention and Management (CPM)/Chronic Diseases and Health Promotion (CHP), WHO/HQ, discussed the need for and role of global initiatives for the prevention and control of NCDs. A global health initiative is an effort to work together towards a common goal. It implies a well-defined and clear goal, a
significant amount of resources (political and financial) and a high level of collaboration (global health partnerships). There are many different global initiatives that exist for different diseases. However, there are no such initiatives for NCDs except for tobacco control. Certain initiatives are evolving for respiratory diseases, such as the Global Alliance against Chronic Respiratory Diseases - GARD, diabetes and cancer. A comprehensive, integrated initiative for all major NCDs has, however, not been initiated. It may be necessary to explore how NCDs could be linked to existing global initiatives such as Health Metrics or the Global Alliance for Healthy Workforce. Dr Resnikoff presented a new WHO Advocacy Toolkit for NCDs and offered suggestions on how it can be used in countries.

Dr Than Sein, Director, Noncommunicable Diseases and Mental Health (NMH), WHO/SEARO, highlighted the need for policy interventions at the national level as an effective means of ensuring NCD prevention and control. As the major NCDs are etiologically linked to a cluster of common risk factors the emphasis should be on comprehensive and integrated prevention and control of such diseases rather than on individual disease-specific programmes. Beyond the risk factors there are also social, economic, cultural and political determinants of NCDs such as rapid globalization and trade liberalization, uncontrolled urbanization, and improved communication and technology which are best addressed by policies which reach beyond the health sector. Implementation of the national NCD programmes should evolve step-by-step, starting from core interventions and progressing to a higher desired level. As an initial step there is a need to adopt interventions that are feasible to implement in the short term with the existing resources. Once the momentum is gained, the NCD programme can be expanded by adopting interventions that could be implemented with a realistically projected increase in or reallocation of resources.

Dr J. Leowski, Regional Adviser, NCD, WHO/SEARO, introduced the Regional Framework for Prevention and Control of NCDs in the South-East Asia Region. The Framework was formulated in 2006 in close collaboration with Member States to facilitate the process of developing, updating and strengthening national policies, strategies and programmes for integrated prevention and control of NCDs. It incorporates an ecological perspective, draws from public health principles and is based on the existing body of evidence. The Framework provides a stepwise construction that offers a flexible and practical approach to assist governments in balancing diverse
needs and priorities while implementing evidence-based interventions. The NCD Framework calls for concomitant application of high-risk and population-based strategies. Introducing health enhancing changes in the physical, social and economic environments has the great potential to modify health behaviours of individuals, communities and populations. In September 2007, the Sixtieth Session of the Regional Committee for South-East Asia endorsed – following the recommendations of the Eleventh Meeting of Health Secretaries of the Member States of the Region – the Framework and urged Member States to initiate appropriate steps to formulate, update and strengthen national policies, strategies and programmes for integrated prevention and control of NCDs.

4.2 Regional capacity

Dr K. Anand, Associate Professor, Centre for Community Medicine, All India Institute of Medical Sciences (AIIMS), New Delhi, India, presented the results of a regional survey conducted in 2006-2007 to assess the capacity of Member countries in prevention and control of NCDs. All 11 Member countries of the Regional participated in the survey, which used a modification of a global tool adopted during the SEANET-NCD meeting in 2005. The responses were collected between February 2006 and March 2007. As a similar survey was conducted in 2001, a comparison of results of both surveys made it possible to assess the progress achieved during this period.

The survey helped in identifying gaps and formulating priorities for collaborative programmes. Table 1 summarizes the status of national capacities for the prevention and control of NCDs as well as the progress achieved in the Region since 2001. By and large, the repeat survey revealed an increase in capacity and the progress made by all countries in developing different components of NCD prevention and control. However, limited progress was noted in developing treatment guidelines and in programme target setting. As Timor-Leste, which became a Member country in 2002, was not covered by the 2001 survey, the information presented in Table 1 pertains to the 10 countries of the SEA Region that had participated in both surveys. These 10 were Bangladesh, Bhutan, DPR Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand.
Table 1: Progress in prevention and control of NCDs in the SEA Region (2001–2006)

<table>
<thead>
<tr>
<th>Area</th>
<th>Indicator</th>
<th>No. of countries</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>2001</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Presence of an NCD unit or department in MoH</td>
<td>4</td>
</tr>
<tr>
<td>Financial allocation</td>
<td>Allocation for NCDPC in the regular budget of MoH</td>
<td>6</td>
</tr>
<tr>
<td>Policy/programmes</td>
<td>National health policy addresses NCDs</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>National health strategy addresses NCDs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>National integrated NCD programme/plan</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Area-specific policies/programme/plan</td>
<td>9</td>
</tr>
<tr>
<td>Target setting</td>
<td>Quantifiable targets in the area of NCDPC</td>
<td>4</td>
</tr>
<tr>
<td>Legislation/regulation</td>
<td>Tobacco</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Food and nutrition (related to NCDs)</td>
<td>9*</td>
</tr>
<tr>
<td>Surveillance</td>
<td>Inclusion of NCDs in national HMIS</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Routine or regular surveillance for NCDs/risk factors</td>
<td>6</td>
</tr>
<tr>
<td>National guidelines</td>
<td>Availability of national guidelines for disease/risk management (for all major NCDs)</td>
<td>1</td>
</tr>
</tbody>
</table>

* Includes legislation not directly relevant to NCDs; MoH – ministry of health; NCDPC – NCD prevention and control

4.3 National policies and programmes

The representatives of Member countries made brief presentations on existing national policies, plans and programmes for the prevention and control of NCDs, existing infrastructure, funding sources, challenges in implementation and the process of monitoring and evaluation.

Bangladesh

The Government of Bangladesh in consultation with different stakeholders developed the National Policy, Strategy and Plan of Action for NCD Surveillance and Prevention in 2006. The goal was to reduce the burden of NCDs. The strategy includes surveillance, health system strengthening, health promotion and networking. The plan of action details the process, output and outcome indicators for different strategies. The funds were provided through governmental allocation with some support from UN agencies.
**Bhutan**

So far the national approach has been largely disease-specific and treatment-oriented with less emphasis on the prevention of risk factors except for tobacco control, which since long had received high priority. Policies and action plans exist also in the area of alcohol consumption, food and nutrition and physical activity. Recognizing the growing burden of NCDs a national strategy for prevention and control of NCDs was drafted in 2007 with the involvement of partners representing several sectors outside health. The diabetes and NCD risk factor survey was conducted in Thimphu.

**DPR Korea**

In the absence of the national delegation Dr A. Mathur of the WHO Country Office in DPR Korea informed that with the primary focus in the country being on communicable diseases, no specific national policy for NCDs exists though the National Health Policy addresses NCDs using an integrated approach. In recognition of the need to have a specific national strategic plan for NCDs prevention and control, an NCD Division has been established, headed by the National NCD Programme Manager. A survey carried out in 2005 has documented a high prevalence of risk factors, especially that of hypertension and of tobacco and alcohol consumption among males. WHO fellowships were used to increase capacity in NCD prevention and control.

**India**

The heavy burden of NCDs in India is well documented. A number of initiatives that apply an integrated approach have been launched. These include the Integrated Disease Surveillance Programme. The National Rural Health Mission also served as a platform for health initiatives. Disease registry for cancer is well established and has been put in place for diabetes and stroke. Though the country does not have any specific national NCD-related policy, the issues related to tobacco and nutrition are well addressed as a part of the regulatory framework. Many in-country capacity strengthening efforts were initiated including those of WHO fellowships. A new National Programme on Cardiovascular Diseases, Diabetes and Stroke was launched. Amendments in the school curriculum and development of
guidelines for healthy schools were other initiatives aimed at developing a health enabling environment.

**Indonesia**

Indonesia formulated the NCD Policy and Strategy in 2003. The focus was on integration around common risk factors, efficiency and effectiveness of interventions, equitable coverage and involvement of the government, private sector and the community. The strategies include strengthening surveillance, health promotion and improving health services delivery and management of NCDs. Subsequently, the Directorate of NCDs was established at the Ministry of Health. The STEPS approach has been integrated in the National Health Survey, especially for behavioural risk factors. The success of community-based intervention demonstrated at Depok has resulted in it being replicated in four more provinces.

**Maldives**

NCD prevention has been identified as a priority area in the national health policy of Maldives. A national NCD prevention and control programme was initiated under the Ministry for Public Health. A National Strategic Plan for the Prevention and Control of NCDs was drafted. It envisages strengthening the evidence base, promoting research and educational activity, strengthening institutional and human resource capacity and addressing NCDs in clinical settings. The plan includes legislative interventions for tobacco, unhealthy diet and physical inactivity. Standard treatment guidelines and protocols would be developed as a part of this plan. A national health promotion network provides a forum for sharing of information and experiences.

**Myanmar**

The National Health Committee of Myanmar provided specific guidance for controlling NCDs as a priority area under the National Health Plan. A survey carried out in Yangon Division in 2003-2004 had documented a high prevalence of diabetes and NCD risk factors in both rural and urban areas. There were several national programmes such as on diabetes, cardiovascular diseases and cancer which were regularly funded by the Government and UN agencies. However, these are fragmented and
vertical, and there is no programmatic integration between them. A national strategy for diet and physical activity was formulated in February 2007 in consultation with different ministries, and a national plan of action was developed on the basis of this strategy.

**Nepal**

A National NCD Policy has been formulated for Nepal. It aimed to promote a healthy lifestyle, strengthen health systems and create an enabling environment for NCD prevention and control. NCD activities were funded through the tax on cigarettes (especially the cancer programme) and the WHO budget. Efforts are on to increase the government’s allocation to the programme through its national regular budget. After the completion of the first NCD risk factor survey in Kathmandu and subsequent surveys in three more districts, Nepal was conducting its first national-level NCD risk factor survey. Cancer registry was initiated in seven hospitals.

**Sri Lanka**

The National Health Policy includes management of NCDs as one of its components. A more specific national NCD policy was drafted and shared with stakeholders for comments. The policy aims to map the epidemiological situation and trends in NCDs and their allied risk factors, minimize exposure of individuals and population to risks, and improve the capacity of the health services to manage people with NCDs. A multifaceted national NCD programme has been established. The activities included preparing legislation on tobacco and alcohol consumption, networking with different stakeholders, social marketing and educational campaigns, school-based interventions, etc. A National NCD Risk Factor Survey was implemented. Infrastructure development and human resource strengthening were also important areas of focus.

**Thailand**

Thailand has completed the first 10 years of the National NCD Prevention and Control Plan (1997-2006). The focus was beyond tobacco control and included diet and physical activity and the creation of an enabling environment. Available information on NCD mortality and morbidity showed an increasing trend for most diseases. Thailand periodically
conducted National Health Examination Surveys that collect information on NCD risk factors. The main areas of thrust for the next 10 year plan were social mobilization, public communication, community building, strengthening surveillance and care systems, and capacity building.

**Timor-Leste**

NCDs are not among the major priorities in Timor-Leste. Three broad areas covered by the NCD programme were oral health, mental health and blindness. They were primarily supported by the government budget. Human resources for these three areas were bolstered.

**Challenges in implementation**

The programmes for prevention and control of NCDs that have been implemented in the countries of SEA Region faced certain common challenges. These include inadequate technical capacity for planning and implementation, lack of baseline information and insufficient human and financial resources due to competing programme priorities. Moreover, certain market forces operating in the globalized world have a powerful detrimental impacts on health and may sometimes negate the gains of government programmes and effects towards health. There is a need for multisectoral involvement and for global, regional and national networking to counter these influences.

### 4.4 Networking

Keeping in mind the established networks for prevention and control of NCDs in other Regions of WHO such as Europe (CINDI) and the Americas (CARMEN), the SEANET–NCD was established in the South-East Asia Region in 2005. The network aims to strengthen regional cooperation among Member countries to develop and implement policies and programmes for the prevention and control of NCDs. It focuses on information sharing, capacity building, advocacy, policy development and research. National networks have been initiated in several countries in the SEA Region. Delegations of five Member countries – Bangladesh, India, Indonesia, Nepal and Sri Lanka – outlined the progress achieved by their national networks.
The Bangladesh Network for NCD Surveillance and Prevention (BanNET) serves as a forum for collaboration among government and nongovernmental agencies. The network aims to collect information about NCDs and their risk factors and disseminate the same among stakeholders so as to facilitate appropriate action. Agencies seeking membership have to apply on a standard format. There are currently 19 agencies included in this network. Organizations with the capacity to generate data and having community-based systems have formed an Alliance for Community-based Surveillance. Guidance for activities is provided by the steering committee chaired by the Minister of Health and Family Welfare. Sectors other than health are also represented in the committee and implementation is monitored by the working committee.

In India networking for NCD surveillance is conducted under the umbrella of the Integrated Diseases Surveillance Programme. A network of professional and voluntary agencies – Indian NCD Network (INN) – acts as a resource centre for networking and undertakes capacity strengthening activities. A government-supported network focusing on integrated prevention and control of NCDs involving the public and private sectors and other partners is, however, yet to be established.

In Indonesia, NCD networking operates under the umbrella of “Healthy Indonesia 2010” and involves the government, professional bodies and community-based organizations. Multiple public events have been held to generate awareness and strengthen advocacy efforts. The network was notified by a ministerial decree in 2004 and the Directorate of NCDs coordinates its activities. The roles of different partners such as the community, schools, mass media, etc are defined. There are sub-networks for tobacco, diet, physical activity, surveillance and management of NCDs.

In Nepal there is an NCD Prevention and Control Committee with 20 partners from different sectors. However, in the absence of an overall NCD policy, activities are not well coordinated. Efforts of the Ministry of Education focus on the incorporation of relevant information in the school and college curriculum while the Ministry of Information supports mass media campaigns and promotes the ban on tobacco and alcohol advertisements.

The NCD network in Sri Lanka was established in 2003 with the Ministry of Health taking the lead and the Directorate of NCD being the nodal point. Efforts are made to sensitize and involve all stakeholders. A schools are targeted for a curriculum change. A school canteen policy and
physical activity programmes have been developed. A national NCD policy and plan of action is being discussed within the network prior to its finalization.

The experience of national NCD networks summarized above highlights the progress made in collaboration between various stakeholders and in particular the creation of a forum for sharing information, experience and expertise in several countries of the Region. It appears that the networking is limited to professional associations and the public health sector. The involvement of the private sector and of other sectors outside health is rather weak. Even within governments, health ministries have been unable to assume the leadership in involving other ministries such as agriculture, food processing, trade, urban transport, etc. in coordinated fashion to address major determinants of NCDs. The schools and the media have, however, been involved most successfully.

After the national presentations, the challenges and opportunities for NCD networking were discussed in working groups. The outcome of the deliberations of the working groups is summarized in Table 2.

### Table 2: Challenges and solutions for NCD networking

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Possible reasons</th>
<th>Suggested solutions</th>
</tr>
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</table>
| Leadership of the health sector | • NCDs have low priority  
• Insufficient leadership capacity of the health team  
• Lack of a committed team and its continuity  
• NCDs being dealt with by different vertical units within the Ministry of Health | • Advocacy for greater emphasis on NCDs  
• Capacity building for programme managers  
• Formation of a core group to last for a sufficiently long time  
• Applying integrated approach to NCD prevention and control |
| Limited involvement of other sectors | • Existing mindset  
• Conflict of interests  
• Poor understanding of roles and responsibilities  
• Inherent distrust of the private sector | • Sensitization of sectors to the socio-economic determinants of NCDs  
• Health impact assessment of all development initiatives  
• Preparation of technical advocacy documents for each stakeholder  
• Packaging available information in appropriate format for each stakeholder  
• Creation of a regulatory framework for the private sector |
### Challenges

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Possible reasons</th>
<th>Suggested solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational issues</td>
<td>• Lack of resources</td>
<td>• Allocation of resources for the network by the government</td>
</tr>
<tr>
<td></td>
<td>• Inadequate co-ordination</td>
<td>• Mobilization of funds from other partners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Creation of a high-level forum for stakeholders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use the available ICT tools to work cohesively</td>
</tr>
<tr>
<td>Delayed outcomes mean that success achieved is not visible</td>
<td>• A time gap between changes in behaviours and disease outcomes</td>
<td>• Focus on risk factor changes</td>
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<td></td>
<td></td>
<td>• Develop a better understanding of issues</td>
</tr>
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</table>

The proposed structure of the SEANET-NCD website was unveiled and participants offered suggestions. The website could serve as a vital source for information-sharing between countries and with different stakeholders. Special attention should be given to usability and ease of utilization of the information displayed.

### 4.5 Partners

Partners such as the International Diabetes Federation (IDF), World Diabetes Foundation (WDF), International Atomic Energy Agency (IAEA) and Society for Local Integrated Development, Nepal (SOLID-Nepal) who participating in the meeting presented their work. They carry out important advocacy activities at the global and national level and support various NCD projects. While IDF is more involved with professionals and with the process of laying down guidelines and policies related to diabetes, WDF works with national- and community-level partners in programme implementation. The Programme of Action in Cancer Therapy (PACT) of the IAEA has the objectives of strengthening infrastructure and improving access to radiotherapy for cancer. It also focuses on early detection of cancer and developing integrated approaches to cancer control, and incorporates capacity strengthening and training initiatives. SOLID-Nepal provides a good example of how the organization working in other areas (reproductive and child health) can become an important partner in implementing the NCD programme given the right guidance and support. SOLID-Nepal has implemented several risk factor surveys in Nepal and carried out result dissemination workshops for different stakeholders.
5. Priority issues in prevention and control of NCDs

5.1 Surveillance

The issues related to NCD surveillance were raised in a panel discussion. The Regional NCD Surveillance Strategy adopted in 2003 stipulated targets for different activities till 2010. The progress in achieving these targets was noted. Conduct of NCD risk factor surveys in nine countries of the Region is a good example of the progress made. However, only two countries have conducted these surveys at the national level whereas three more countries are in the process of doing so. Member countries of the SEA Region need to move from sub-national surveys to the national surveillance mode. The first round of surveys generated local evidence and contributed to strengthening national capacity to introduce a sustainable mechanism for data collection at the national level. The experience from Nepal was shared, with details on the way it moved from a survey in urban Kathmandu to include three districts and then to emerge into a national-level survey. The field experience gathered by these surveys illustrates the operational, geographical and other barriers encountered. Collection of data on biochemical risk factors such as fasting blood glucose and total cholesterol required technical and financial resources that many countries do not possess. More needs to be done to improve morbidity and mortality surveillance. Cancer registries exist in some countries and a stroke surveillance approach has been proposed by WHO. The experience of its implementation in several sites in India was presented. Stroke surveillance needs to be integrated into the surveillance of other diseases.

Effective use of surveillance-generated data in policy development and implementation remains an important challenge. In this context, the role of the infobase deployed at the national level was discussed. The NCD InfoBase was developed as a tool to link evidence to policy. However, countries are making slow progress in updating and utilizing it. The ways and mechanisms to improve use of the infobase were discussed. It was postulated to make the infobase more user-friendly and to develop more applications intended for programme managers. For this work, it was recommended to make use of the capacity of the WHO collaborating centres.

The issues related to oral health surveillance, for which tools are already available, were also discussed. Data on basic oral health indicators (dental caries, periodontal health, teeth loss, dental fluorosis, oral premalignant and
malignant lesions, oro-facial trauma and development anomalies), behavioural risk factors (consumption of sugar, sweets and carbonated drinks, oral hygiene practices, tobacco use, oral health-seeking behaviours such as the number of visits to and reasons for visiting a dentist, number of filled teeth and use of dentures, etc) and fluoride levels in drinking water are being periodically collected in some countries. To monitor the trends WHO recommends conducting oral health surveys every four to five years. Thailand has a long experience in conducting such surveys every five years. The results of these surveys were shared with the participants. In India, a multisite survey had been carried out recently. Results of oral health surveys conducted in the Region provide the rationale for adopting the public health approach to oral health rather than a clinical approach.

5.2 Health promotion

Dr C. Varghese, NPO-NMH, WHO Country Office for India, discussed the principles of health promotion and how to operationalize them to address NCDs. There is a need to change mindsets starting from how the evidence is being presented. As health promotion prioritizes population-based approaches the data on risk factors should be presented on the basis of distribution rather than proportion. This helps stakeholders to view the issues in the right perspective and to understand the need for shifting the distribution rather than focusing on individuals.

Health promotion means empowering people to take the responsibility of their health in their own hands. It is a core public health function of the government and addresses both communicable and noncommunicable diseases. The theory behind health promotion and its principles has been well laid down since the Ottawa Charter and reiterated more recently through the Bangkok Declaration. The effectiveness of behaviour change efforts backed by a supportive legislative and regulatory environment has been well documented in North Karelia, Finland. However, countries in the SEA Region will have to develop their own models as health promotion is closely linked to culture, value systems, beliefs and social customs. He elucidated with examples from reproductive health and sanitation the need for communicating clearly and forcefully after understanding the local context. He emphasized the need to reorient health systems as well as other systems such as transport and food processing so as to enable people to practise healthy lifestyles. The health-
damaging influence of the market and media must be countered using more effective strategies for communication and creating a better legislative and regulatory framework, he urged.

### 5.3 Legislation and regulation

At the panel discussion on creating conducive regulatory and legislative environment, case studies were presented on tobacco control in India and Thailand and on a smoke-free city of Chandigarh. The experience recounted from both countries was encouraging. The Global Framework Convention for Tobacco Control (FCTC) gave a fillip to the efforts. Fiscal and legislative measures addressing both the demand and the supply side of tobacco use were discussed. The demand side was addressed by regulating the advertisement and labelling whereas the supply side was addressed by restriction of its sale. The success of tobacco control depends on a combination of good science (support by scientists and professionals), social participation (national and international NGOs) and a high political commitment. Though the lessons learnt during implementation of tobacco control programmes are well known, translating these to multi-dimensional areas such as diet and physical activity is difficult.

The role of legislation and regulations in the prevention and control of NCDs was further discussed by the working groups. The following issues were raised:

- There are many existing laws and regulations related to or potentially related to NCDs. These should be reviewed. There are areas where legislation has been shown to be effective.
- For legislation to be passed it is important to address the different interest groups and stakeholders. The existing evidence needs to be customized and packaged for each stakeholder so that they are aware of the issues and consequences of not doing anything.
- Each country has its own ways of formulating laws that need to be followed.
- It is important to enforce the laws effectively. A practical mechanism for enforcement need to be identified. The role of the media and community as “watchdogs” was emphasized.
For effective monitoring appropriate indicators need to be developed and a nodal agency identified to conduct periodic assessment and disseminate the results. These require establishment of effective surveillance systems.

Self regulation by the private sector has no role in tobacco and alcohol whereas the same might have some role to play in the area of diet. Mechanisms need to be established to effectively monitor the results of self-regulatory approaches.

WHO can provide technical support and contribute to building capacity in formulating, enacting and enforcing health-related legislation. It can assist in preparing a legislative framework for alcohol, diet and physical activity and share best practices from other countries.

5.4 Community-based interventions

The session on community-based interventions had reviewed experiences from India, Indonesia and Thailand. Such interventions target the community for the desired change and empower it to act as the agent of change and use its own resources for this purpose. The strategy includes raising awareness of the community so as to change risk perceptions, providing simple tools, technology and lifestyle choices, and facilitating the process of adoption of appropriate options by the community. Unlike legislative and policy measures which are mainly “push” factors, community-based interventions create an intrinsic demand for change. The results are best when both occur in conjunction. These have to be supplemented with the reorientation of health services.

In Depok, Indonesia, health interventions were executed at integrated health posts where people were examined and advice or services provided. In Ballabgarh, India, this was done through health camps. Both in Depok and Ballabgarh, a “healthy city” approach was adopted to involve other stakeholders. Both sites developed and used their own context-specific educational material. Involvement of stakeholders was best exemplified in Depok where there was strong governmental support. Monitoring and evaluating of the intervention was emphasized. While the oral health interventions are likely to show results in the short term, NCD risk behaviour changes are visible only in the medium term. Community-based
interventions implemented in India, Indonesia and Thailand have resulted in a better understanding of issues. Indonesia and Thailand have set more sites of community-based NCD interventions based on the successful experiences.

5.5 Health sector interventions

Prevention and management of NCDs at the primary health-care level was the subject of the panel discussion. The panelists felt that the current health systems are oriented towards acute communicable diseases and do not cater adequately to NCDs. The emphasis is more on curative and drug based solutions rather than prevention and health promotion approaches. Bringing health interventions closer to clients would result in resource savings. Guidelines for the provision of services should be provided for all levels. Guidelines for the management of NCDs such as hypertension, diabetes, and heart diseases exist in many countries of the Region. However the primary contact of clients is often with paraprofessional health workers. There is not sufficient experience and evidence to establish models for their involvement in NCD management. NCD risk assessment is an important component of NCD management. WHO/HQ has come out with risk prediction charts for cardiovascular diseases which are evidence-based and comprehensive. However, they are complicated for use in primary health-care settings. A simplified risk scoring system specific to diabetes was developed by one of the regional centres of expertise.

5.6 Capacity strengthening

NCD policy development and implementation was identified by the Sixtieth Regional Committee for the SEA Region as an important priority area. The Regional Office is contributing to capacity strengthening of the programme managers in reviewing and updating existing and formulating new NCD policies, plans and programmes. A regional training package for this purpose was developed. The package aims to: (i) empower policymakers and programme managers with information on the current burden of NCDs and associated risk factors; (ii) inform evidence-based cost-effective interventions; and (iii) equip with strategies and public health tools to develop/strengthen policies, plans and programmes for integrated prevention and control of NCDs. The package has 10 modules. Each module was written by an expert and peer reviewed. The package had
been pretested in Nepal and used at workshops in Bhutan, Indonesia and Maldives. The response of the participants has been encouraging and the programme has been strengthened by the feedback received. Further workshops are planned in other Member countries of the SEA Region.

While the regional capacity strengthening project targets managers of current NCD programmes, there is a need to establish sustainable training on NCD prevention and control at various levels of education. In this context, Dr R. Kumar made a presentation on public health education and strengthening the NCD workforce. He emphasized the need to strengthen undergraduate curriculum for doctors, nurses and para-health professionals to include the public health approach to NCDs. Public health training which is currently focusing on maternal and child health and communicable diseases need to be aligned with the current and future requirements for the prevention and control of NCDs. There is also a need to focus on non-health professionals as many non-health sectors mould the socio-economic environment conducive to NCDs. The existing institutional capacity in the Region to carry out such training is largely insufficient. There is a need to develop a curriculum for different types of courses and identify appropriate institutions to carry out such training. Distance learning and web-based packages also need to be developed so as to increase the access to such training.

6. NCD Plan of Action for 2008-2013

The World Health Assembly (WHA) passed the resolution on “Prevention and control of noncommunicable diseases” in 2007. The resolution requested the Director-General of the World Health Organization to prepare an Action Plan for the Prevention and Control of NCDs for 2008-2013 to be submitted to the 61st World Health Assembly in 2008. The reported meeting of the SEANET-NCD provided an opportunity to consult Member countries in the development of the plan of action.

6.1 Global Action Plan

Dr S. Resnikoff presented the draft global plan of action. It provides a platform for planning at all levels of WHO and is flexible to allow for adaptation at the national or regional level. The action plan has nine strategic priorities: (i) surveillance with a focus on NCD risk factors;
(ii) advocacy and communications; (iii) policy development; (iv) health promotion and population-based disease prevention; (v) strengthening and reorienting of health systems to improve prevention and management of NCDs; (vi) partnerships, intersectoral collaboration and networking; (vii) capacity strengthening in countries; (viii) resource mobilization; and, (ix) strategic support for research. Objectives, activities and indicators for each strategy were listed.

The participants commented that the Global Action Plan should also have some global end-points and the strategy of advocacy and intersectoral coordination at the global level needs to be covered more extensively.

6.2 Regional Action Plan

Dr J. Leowski presented the regional plan of action. The plan sets out priorities, actions, a timeframe and performance indicators for prevention and control of NCDs in the SEA Region for the period 2008-2013. The objective is to support Member countries in: (i) estimating population needs through assessing NCD risk factors and advocating for action; (ii) formulating, adopting and implementing country-specific and resource-sensitive national NCD policies, strategies and action plans; (iii) adopting healthy lifestyles through implementation of health promotion and primary prevention strategies; (iv) promoting intersectoral collaboration; and, (v) assisting in enhancing capacity, mobilizing resources, augmenting infrastructure and supporting the workforce. The strategies listed in the action plan were broadly similar to that of the global action plan. These are conducting epidemiologic assessment, advocacy and awareness generation, strategic planning, capacity strengthening, resource mobilization, infrastructure development, health promotion and disease prevention, multisectoral coordination, health-sector interventions, and monitoring and evaluation. The participants requested that there should be a stronger focus in the document on legislation, economic issues and capacity strengthening in the document.

7. Strengthening oral health: Strategic directions

Dr C. Ndiaye, RA-ORH, WHO Regional Office for Africa (AFRO), shared her experience of integrating oral health (ORH) into other disease
programmes in the African Region of WHO. Oral diseases share many common risk factors with NCDs such as tobacco consumption, diet, etc. In the African Region, oral lesions of HIV/AIDS, cancrum oris and maxillofacial trauma are the main conditions. The Region adopted a 10-year Oral Health Strategy (1999-2008). It focuses on the development of national policies and strategies, management information system development, oral health-care services, education and training, and integration into other health programmes. Oral health has been linked to Integrated Management of Childhood Illnesses (IMCI), NCD risk-factor surveillance, nutrition, maternal and child health, HIV/AIDS and school health programmes. The experiences demonstrate how oral health issues have been addressed in an integrated manner in a limited resource environment.

The country presentations on ORH policies, plans and programmes revealed a predominantly clinical approach being followed in most Member countries of the SEA Region for the delivery of ORH services and inadequacies of an epidemiological assessment of the situation. Health ministries had poor representation of dental professionals and doctors are not trained in oral health issues during their undergraduate training. The networking for ORH in the Region was rather weak and suffered from problems similar to those of NCD networking. Thai Dental Network's activities against tobacco control were presented. The participants identified a major role for legislation, especially in the area of diet.

Dr Sunsanee Rajchagool, Director, Intercountry Centre for Oral Health, Chiang Mai, Thailand, presented an outline of the proposed SEA Regional ORH strategy. The focus has to shift from clinical to public health dentistry. The current systems are professional-centred and clinically oriented and thus inaccessible and unaffordable to a majority of people. Even preventive dentistry currently is technology-oriented and state-dependent. There is a need to change the paradigm to “oral health promotion”, link it to general health promotion and integrate it with other NCDs that share common risk factors and strategies for their control. Community-based programmes need to be developed. The proposed shift in approach has major implications for human resource and health systems development. Operational research needs to be promoted on priority ORH issues, such as those related to inequalities in ORH care delivery. Under- and postgraduate ORH curricula need to include knowledge on community-oriented oral health-care delivery. It is important to promote networking between different national and international institutions to
strengthen ORH education and research. The participants appreciated the approach proposed in the outline of the Regional ORH Strategy. A more detailed discussion would be needed with national health authorities before the strategy is finalized and adopted.

8. Conclusions and recommendations

8.1 Conclusions

(1) There is an increasing commitment in Member countries of the Region for prevention and control of chronic, noncommunicable diseases (NCDs). This commitment, however, has not been fully translated into programmes.

(2) The partnership between different stakeholders is sub-optimal, especially with those outside the health sector and with international partners.

(3) The SEANET-NCD provides a good forum for sharing information and for networking between different partners in the area of NCD prevention and control.

(4) The information and communication technology (website for SEANET-NCD and NCD Infobase) can be used for dissemination of evidence and for networking.

(5) Currently the NCDs and their risk factors are not being addressed adequately by the primary health-care systems.

(6) Tobacco control serves as a good example in the area of legislation and intersectoral action.

(7) Progress has been made in achieving the targets of the Regional NCD Surveillance Strategy.

(8) Oral health problems pose a significant burden on the population in the Region, but they are getting inadequate priority among policymakers and programme managers.

(9) Opportunities exist for integration of oral health issues into NCD surveillance, prevention and control, as well as health promotion.
8.2 Recommendations

The following recommendations, for both Member countries and WHO, emerged from the deliberations of the meeting:

**Recommendations for Member countries**

(1) To develop, review and revise national public health-oriented policies, plans and programmes for integrated prevention and control of NCDs and for oral health.

(2) To establish and sustain appropriate infrastructure and funding mechanisms for management of national NCD prevention and control programme including oral health.

(3) To create, support and sustain a multisectoral forum for addressing all aspects of NCD prevention and control and oral health.

(4) To support the development of legal and other appropriate instruments to decrease the level of modifiable risk factors in the population.

(5) To align and strengthen primary health-care systems to address NCDs and their risk factors and mainstream NCD prevention and control into primary health care.

(6) To monitor, evaluate, document and disseminate reports on NCD programmes and activities regularly.

(7) To promote capacity strengthening and public health education at all levels for NCD prevention and control and for oral health.

(8) To consider appointing a national focal point for oral health (Chief Oral Health Officer)

(9) To form a country and intercountry network forum to facilitate action in the area of oral health.

**Recommendations for WHO**

(1) To assist Member countries in strengthening the capacity for NCD surveillance, prevention and control.

(2) To facilitate the process of bringing together all concerned stakeholders and to actively involve them in NCD prevention and control activities, including oral health promotion.
(3) To produce advocacy documents for different stakeholders.

(4) To facilitate development of legislative and regulatory frameworks for alcohol, diet and physical activity.

(5) To strengthen the SEANET- NCD, including experts and national programme managers of oral health, through regional and sub-regional mechanisms including the SEANET website.

(6) To provide support and coordinate the NCD Infobase through WHO Collaborating Centres.

(7) To facilitate development of guidelines, norms and standards for integrated management of NCDs at the primary health-care level.

(8) To provide support in developing guidelines for oral health promotion.

(9) To provide technical support for oral health strategy development, and establish an oral health focal point to coordinate the oral health programme at the Regional Office.
Annex 1

Message from Dr Samlee Plianbangchang,
Regional Director, WHO South-East Asia Region

Chronic noncommunicable diseases (NCDs) such as cardiovascular diseases, cancer, chronic lung diseases and diabetes have emerged as a major public health challenge in the South-East Asia (SEA) Region. They threaten the lives and health of millions of people as well as economic and social development.

According to WHO estimates NCDs account for 54% of all deaths in the Region. A worrisome fact is that middle-aged adults from Member countries show disproportionately high death rates due to NCDs in comparison with those living in more developed countries. People in countries of the Region tend to contract disease at younger ages, suffer longer and die sooner than people of high-income countries. Almost half of the 89 million NCD related deaths projected in the Region during the next 10 years will be premature.

NCDs are the leading cause of morbidity and disability, contributing to 48% of the disease burden in the Region. NCD rates are accelerating in all socioeconomic strata. If effective public health action is not taken over the next 10 years, disability and premature death from NCDs will increase by more than 21% in South-East Asia.

NCDs are increasingly common among the poor and marginalized. They contribute to poverty and are among the key barriers to socioeconomic development. In developing countries, the poor population is likely to bear the brunt of chronic diseases; mostly due to lack of awareness of risk factors, inability to modify lifestyles and other reasons. The progressive pandemic of NCDs perpetuates chronic poverty at the household level.

There is strong evidence that significant reduction in NCDs can be achieved by the introduction of simple public health interventions addressing major NCD risk factors and their socioeconomic determinants at the community and individual levels. There is an increased emphasis on
targeting the common risk factors and a heightened commitment to apply integrated approaches to deal with all major NCDs. But the existing knowledge on effective, efficient and affordable interventions to modify unhealthy diet, physical inactivity and tobacco consumption is largely underutilized.

Recent regional initiatives have helped to strengthen the national capacity to collect, manage, analyse and use relevant data. NCD risk-factor surveillance has been instituted in India, Indonesia and Thailand. Collection of nationally representative data on NCD risk factors has been initiated in Nepal and Sri Lanka. Datasets, collected in surveys using the STEPS method promoted by WHO, were conducted recently in eight countries. Technical support was also provided for establishing national NCD databases.

Beyond the risk factors, there are also major socioeconomic determinants of NCDs that lie outside the domain of the health sector. Incorporating comprehensive NCD prevention and control interventions into existing mainstream public health programmes as well as socioeconomic programmes outside the health sector have the potential to prevent at least 80% of all cases of heart disease, stroke and diabetes, and 40% of cancer.

Demonstration projects using community-based interventions for prevention and control of NCDs are being implemented with WHO support in several countries including Bangladesh, India, Indonesia and Sri Lanka. These projects provide evidence on the feasibility and appropriateness of community-based approaches for integrated prevention and control of NCDs in developing countries. The project conducted in Depok, near Jakarta, Indonesia gained considerable recognition, paving the way for further subnational interventions.

Member states of the SEA Region are strengthening their public health response to ongoing epidemics of NCDs. Indonesia and Thailand have already made considerable progress in this regard. In 2006, India launched a national programme for prevention and control of diabetes, cardiovascular diseases and stroke to complement its national cancer control programme. During 2006 and 2007, WHO supported the development of national policies and action plans for NCD prevention in Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka.
A series of regional modules compiling evidence-based information required for developing, reviewing and revising national NCD policies, strategies and programmes have been developed. In 2007 the modules were used at national workshops in Bhutan, Indonesia, Maldives and Nepal. All Member countries of the Region recently conducted assessments of national programme capacity. The results of this assessment are being used to identify the further needs of countries and to help in sharing information, experiences and best practices.

The WHO Regional Framework for Prevention and Control of NCDs was formulated in early 2006 to ensure that the translation of policy guidance into action is tailored to the socioeconomic conditions and health system of each Member country. The Framework provides a step-wise approach to the development and implementation of comprehensive national policies, plans and programmes. The health secretaries of Member countries reviewed the regional framework in June 2006 and reiterated the need to strengthen the integrated epidemiological surveillance and population-based public health interventions using existing health-care systems to target the common risk factors and determinants of major NCDs.

The recently concluded Sixtieth Session of the Regional Committee for South-East Asia further endorsed the Regional Framework and urged Member States to initiate appropriate steps to formulate, update and strengthen national policies, strategies and programmes for integrated prevention and control of NCDs.

WHO is playing an instrumental role in fostering partnerships, coordinating intersectoral collaboration and facilitating the process of national, regional and global networking. The 2007 World Health Assembly Resolution on Prevention and Control of NCDs urged Member States to establish and strengthen national coordinating mechanisms and local coalitions to support NCD networking activities. In the SEA Region, national networking activities for integrated NCD prevention have been initiated in India, Indonesia, Maldives, Nepal, Sri Lanka and Thailand.

Also, the Regional Office has set up a Regional Network for Integrated NCD Prevention and Control known as SEANET-NCD. The network creates an important advocacy and capacity-building platform for regional implementation of global WHO commitments such as the Framework Convention on Tobacco Control and Global Strategy on Diet, Physical
Activity and Health. Its general objective is to strengthen regional cooperation among Member States for the prevention and control of NCDs. The networking focuses on information sharing, capacity building, advocacy, policy development and research.

Implementation of the Regional Framework for Prevention and Control of NCDs requires the coordinated efforts of multiple stakeholders from the government, the private sector, civil society and international agencies. It is encouraging to note that this important meeting of the regional network is being attended by representatives of most of the Member countries of the SEA Region. The multisectoral, multidisciplinary and multilevel mix of committed partners will make this an appropriate forum to review the progress of NCD programme implementation in the Region and to discuss its future activities.

One of the important specific objectives of this meeting is to review the status of oral health programmes and to advise on their integration with NCD prevention and control. Oral diseases, such as dental caries, periodontal diseases, tooth loss and oral cancer represent a serious public health problem in the SEA Region. The greatest burden of oral diseases lies on disadvantaged populations and is particularly high among the elderly.

The current pattern of oral diseases in the Region is strongly linked to known and modifiable economic, psychosocial and cultural determinants. Unhealthy behaviours such as tobacco use and excessive consumption of alcohol and sugar are among the roots of major oral diseases and NCDs. Hence, prevention and control of oral diseases and NCDs has multiple programmatic and operational commonalities.

Most current oral health systems are based on private dental practitioners. A majority of people in the SEA Region do not benefit from systematic oral health care. Reaching the unreached requires developing strong, public health-oriented oral health promotion and disease prevention programmes, community empowerment, and broad introduction of simple low-cost interventions with full utilization of primary health-care systems, including a multipurpose health workforce.

This meeting of the SEANET-NCD will review and elaborate the outline of the regional oral health strategy. I do hope that it will contribute to strengthening intercountry and intersectoral collaboration and generate a
high level commitment for bolstering oral health programmes in Member countries.

The excellent contributions of the Bureau of Noncommunicable Diseases, Ministry of Public Health, Thailand, in strengthening the regional NCD programme in general, and in supporting the organization of this very important regional meeting in particular, are highly appreciated.

I trust that the meeting will fully accomplish its objectives and look forward to the development of the SEANET-NCD.
## Annex 2

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Annex 3

Regional Framework for Prevention and Control of Noncommunicable Diseases

1. Epidemiological assessment
2. Awareness generation and high-level advocacy
3. Development of policy and strategic plan
4. Capacity strengthening, resource mobilization and infrastructure development
5. Multisectoral and multi-level action to modify environment (physical, social and economic)
6. Health sector interventions
7. Population decrease in NCD risk factor level and reduced adverse health events
8. Reduced health and economic burden of NCD

Planning STEP 1
- Estimate population need and advocate for action

Planning STEPS 2 & 3
- Formulate and adopt policy
- Identify policy implementation steps

Implementation STEPS

Outcome & impact